



## ROBOTIC WORMS? WHY NOT?

Some people look at a worm and see bait. **BERRY RAMIREZ '18** sees the future. The physics major works in the Complex Matter and Nonlinear Physics Laboratory of Arshad Kudrolli, professor and chair of physics, running experiments involving earthworms' movement through various substances, from sand and clay to bodily fluids. The research could one day lead to the development of robotic worms. You read that correctly. Earthworms' tunneling motions have already inspired researchers to dream up robots that can inch along the ground in military reconnaissance missions, or create devices that could thread their way through digestive tracts and other tight spaces in the human body to help with medical diagnoses and treatments.

To observe the worms' movement up close, Ramirez places the red wigglers, or *Eisenia fetida*, in a glass tank full of hydrogels — the same gooeey, translucent beads used in diapers and plant arrangements. Each time, he uses a different size bead, ranging from 1 centimeter to 2 millimeters, to observe and analyze how the worms' movement changes.

**"Our goal is not only to understand how these organisms move underground, but also learn from the techniques they use under various water content, and develop our own examples of optimal robots,"**

Kudrolli says.

Now that he's dug into earthworm research, Ramirez is pursuing his end goal: a career in bioengineering. You might say he's hooked.



## Fund honors D'Army Bailey's civil rights legacy

THE LATE D'ARMY BAILEY '65, LL.D. '10, P '00, WAS MANY THINGS IN HIS STORIED LIFE: JUDGE, ACTIVIST, AUTHOR, FATHER, HUSBAND, AND CLARKIE.

The memory of the man who assumed those roles with strength and grace was celebrated at an Oct. 14 ceremony announcing the creation of the **D'ARMY BAILEY '65** Diversity Fund, which supports initiatives and academic endeavors to advance and help sustain an inclusive, engaged campus. Its reach will include providing scholarships to students from historically underrepresented backgrounds who are experiencing financial hardship, assisting in the recruitment and retention of a more diverse faculty, and fostering a more diverse curriculum.

President David Angel told the gathering of family and friends inside Dana Commons' Fireside Lounge that Bailey was one of Clark's most honorable graduates, and was someone who "helped shape the country and the world." He recounted how Bailey was expelled from Southern

